



PPPPPPPP	AAAAAA	TTTTTTTT	AAAAAA	BBBBBBBB	LL	EEEEEEEEE	SSSSSSSS
PPPPPPPP	AAAAAA	TTTTTTTT	AAAAAA	BBBBBBBB	LL	EEEEEEEEE	SSSSSSSS
PP PP	AA AA	TT	AA	BB BB	LL	EE	SS
PP PP	AA AA	TT	AA	BB BB	LL	EE	SS
PP PP	AA AA	TT	AA	BB BB	LL	EE	SS
PPPPPPPP	AA AA	TT	AA	BBBBBBBB	LL	EEEEEEEEE	SSSSSSSS
PPPPPPPP	AA AA	TT	AA	BBBBBBBB	LL	EEEEEEEEE	SSSSSSSS
PP	AAAAAAA	TT	AAAAAAA	BB BB	LL	EE	SS
PP	AAAAAAA	TT	AAAAAAA	BB BB	LL	EE	SS
PP	AA AA	TT	AA	BB BB	LL	EE	SS
PP	AA AA	TT	AA	BB BB	LL	EE	SS
PP	AA AA	TT	AA	BBBBBBBB	LLLLLLLL	EEEEEEEEE	SSSSSSSS
PP	AA AA	TT	AA	BBBBBBBB	LLLLLLLL	EEEEEEEEE	SSSSSSSS
PP	AA AA	TT	AA	BBBBBBBB	LLLLLLLL	EEEEEEEEE	SSSSSSSS

LL		SSSSSSSS
LL		SSSSSSSS
LL		SS
LL		SS
LL		SS
LL		SSSSSS
LL		SSSSSS
LL		SS
LL		SS
LL		SS
LL		SSSSSSSS
LL		SSSSSSSS

(2)	63	DEFINITIONS
(3)	91	DRIVER PROLOGUE TABLE
(4)	130	DRIVER DISPATCH TABLE
(5)	151	FUNCTION DECISION TABLE

0000 1 .TITLE PATABLES  
0000 2 .IDENT 'V04-000'  
0000 3 \*\*\*\*\*  
0000 4 \*\*\*\*\*  
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0000 23 \*  
0000 24 \*  
0000 25 \*\*\*\*\*  
0000 26  
0000 27 ++  
0000 28  
0000 29 FACILITY:  
0000 30  
0000 31 VAX/VMS EXECUTIVE, I/O DRIVERS  
0000 32  
0000 33 ABSTRACT: THIS MODULE CONTAINS THE DRIVER PROLOGUE TABLE,  
0000 34 DRIVER DISPATCH TABLE, AND FUNCTION DECISION TABLE.  
0000 35  
0000 36 AUTHOR: N. KRONENBERG, JUNE 1981  
0000 37  
0000 38 MODIFIED BY:  
0000 39  
0000 40 V03-006 NPK3057 N. Kronenberg 23-Jul-1984  
0000 41 Change retry count from 10. to 50.  
0000 42  
0000 43 V03-005 NPK3029 N. Kronenberg 22-Jul-1983  
0000 44 Change retry count from 3 to 10.  
0000 45  
0000 46 V03-004 KTA3046 Kerbey T. Altmann 03-Apr-1983  
0000 47 Add \$DEVDEF and \$SSDEF.  
0000 48  
0000 49 V03-003 ROW0099 Ralph O. Weber 8-JUN-1982  
0000 50 Add error log buffer size and register dump routine entries  
0000 51 in the DDTAB macro.  
0000 52 This change will be in a new driver image shipped in V3.1.  
0000 53  
0000 54 V03-002 NPK2019 N. Kronenberg 6-Apr-1982  
0000 55 Make start I/O routine return ill function code instead  
0000 56 of bugcheck.  
0000 57

0000 58 :  
0000 59 :  
0000 60 :  
0000 61 :--

V03-001 NPK2016  
Fixed .TITLE

N. Kronenberg

18-Mar-1982

0000 63 .SBTTL DEFINITIONS  
0000 64  
0000 65  
0000 66 ;  
0000 67 : System definitions (LIB.MLB):  
0000 68 :  
0000 69  
0000 70 SCRBDDEF :Channel Request Block offsets  
0000 71 SDCDEF :Device type codes  
0000 72 SDDBDEF :Device Data Block offsets  
0000 73 SDEVDEF :Device definitions  
0000 74 SDPTDEF :Driver Prologue Table offsets  
0000 75 SDYNDEF :Dynamic block types  
0000 76 SIPLDEF :IPL definitions  
0000 77 SPDTDEF :Port Descriptor Table offsets  
0000 78 SUCBDEF :Unit Control Block offsets  
0000 79 SSSDEF :System service success codes  
0000 80 SVECDEF :CRB transfer vector blk offsets  
0000 81  
0000 82 :  
0000 83 : PADRIVER definitions (PALIB.MLB):  
0000 84 :  
0000 85  
0000 86 SPAPDTDEF :CI extension to PDT  
0000 87 SPAREGDEF :CI port register definitions  
0000 88 SPAUCBDEF :CI extension to UCB  
0000 89

0000	91	.SBTTL DRIVER PROLOGUE TABLE	
0000	92		
0000	93	DPTAB	END=PASEND,- ;End of driver label
0000	94		ADAPTER=CI,- ;Adapter type
0000	95		UCBSIZE=UCB\$C_PASIZE,- ;UCB size
0000	96		NAME=PADRIVER,- ;Driver name
0000	97		FLAGS=<DPTSM_SCS!DPTSM_NOUNLOAD> ;Driver requires SCS load
0038	98		; and cannot be reloaded
0038	99		
0038	100	DPT_STORE INIT	
0038	101		
0038	102	DPT_STORE	UCB,UCB\$B_FIPL,B,IPL\$_SCS ;Fork IPL
003C	103	DPT_STORE	UCB,UCB\$L_DEVCHAR,L,<- ;Device characteristics:
003C	104		DEV\$M_SHRT- ; Sharable
003C	105		DEV\$M_AVL- ; Available
003C	106		DEV\$M_ELG- ; Error logging device
003C	107		DEV\$M_IDV- ; Input device
003C	108		DEV\$M_ODV> ; Output device
0043	109		
0043	110	DPT_STORE	UCB,UCB\$B_DIPL,B,20 ;Device interrupt IPL
0047	111	DPT_STORE	UCB,UCB\$B_DEVCLASS,B,- ;Device class =
0047	112		DCS_BUS ; bus
004B	113	DPT_STORE	UCB,UCB\$B_ERTMAX,B,50 ;Retry count is 50 times
004F	114	DPT_STORE	UCB,UCB\$B_ERTCNT,B,50 ; without reboot of system
0053	115		
0053	116	DPT_STORE REINIT	
0053	117		
0053	118	DPT_STORE	DBB,DBBSL_DDT,D,PASDDT ;DDT address
0058	119	DPT_STORE	CRB,CRBSL_INTD+4,- ;Interrupt routine addr
0058	120		D,PASINT
0058	121	DPT_STORE	CRB,CRBSL_INTD+VECSL_INITIAL,-
005D	122		D,PASCTLINIT
005D	123	DPT_STORE	CRB,CRBSL_INTD+VECSL_UNITINIT,-
0062	124		D,PASUNITINIT
0062	125	DPT_STORE	CRB,CRBSL_TOUTROUT,- ;Unit init addr
0067	126	DPT_STORE	D,CNFSTIMER ;Periodic wake up routine
0067	127		
006C	128	DPT_STORE	END ;

0000	130	.SBTTL	DRIVER DISPATCH TABLE					
0000	131							
0000	132							
0000	133	DDTAB	DEVNAM=PA,-					
0000	134		START=FATAL_QIO,-					
0000	135		FUNCTION=PASFUNCTABLE,-					
0000	136		UNITINIT=PASUNITINIT,-					
0000	137		ERLGBF=ELOGSK_BYTES,-					
0000	138		-					
0000	139		REGDMP=ELOGSREGDUMP					
0038	140							
0038	141							
0038	142	:	No START I/O's possible:					
0038	143	:						
0038	144							
0038	145	FATAL_QIO:						
0038	146							
50	00F4	8F	3C	0038	147	MOVZWL	#SSS_ILLIOFUNC, R0	
51	D4			003D	148	CLRL	R1	
				003F	149	REQCOM		

## FUNCTION DECISION TABLE

K 7

16-SEP-1984 01:07:58 VAX/VMS Macro V04-00  
5-SEP-1984 00:17:04 [DRIVER.SRC]PATABLES.MAR;1Page 6  
(5)

0045 151 .SBTTL FUNCTION DECISION TABLE  
0045 152  
0045 153 PASFUNCTABLE:  
0045 154 FUNCTAB :-  
0045 155 <> :Valid functions:  
0045 156 <> :None at present  
0040 157  
0040 158 FUNCTAB :-  
0040 159 <> :Buffered functions:  
0055 160  
0055 161  
0055 162  
0055 163  
0055 164  
0055 165 .END

SSS	=	00000020	R	02	PA_PIC	00000924
SSSCURSIZ	=	000001C4			PA_PMC	00000004
SSSNEWSIZ	=	000001D0			PA_PPR	00000940
SSOP	=	00000002			PA_PQBBR	00000904
ATS_CI	=	00000004			PA_PS	00000900
CNF\$TIMER	*****		X	02	PA_PSR	00000918
CRBSL_INTD	=	00000024			PDT\$B_DQIMAP	00000154
CRBSL_TOUTROUT	=	0000001C			PDT\$B_HSHUT_DG	000001B0
DCS_BUS	=	00000080			PDT\$B_MAX_PORT	0000017C
DDBSL_DDT	=	0000000C			PDT\$B_NXT_PORT	0000017E
DEVSM_AVL	=	00040000			PDT\$B_PO_BSTS	00000180
DEVSM_ELG	=	00400000			PDT\$B_P1_LBSTS	00000181
DEVSM_IDV	=	04000000			PDT\$B_PLUGMAP	00000134
DEVSM_ODV	=	08000000			PDT\$B_PORTMAP	00000114
DEVSM_SHR	=	00010000			PDT\$B_PORT_NUM	0000017D
DPTSC_LENGTH	=	00000038			PDT\$B_REQIDPS	0000017F
DPTSC_VERSION	=	00000004			PDTSC_LENGTH	= 000000E4
DPT\$INITAB	=	00000038	R	02	PDTSC_PAREGBASE	000000E4
DPT\$M_NOUNLOAD	=	00000004			PDTSC_PAREGEND	00000110
DPT\$M_SCS	=	00000008			PDTSC_PQB	= 000001E0
DPT\$REINITAB	=	00000053	R	02	PDT\$L_CNF	000000E4
DPT\$TAB	=	00000000	R	02	PDT\$L_CQ0	000000F0
DYN\$C_CRB	=	00000005			PDT\$L_CQ1	000000F4
DYN\$C_DDB	=	00000006			PDT\$L_DFQ	000000FC
DYN\$C_DPT	=	0000001E			PDT\$L_DFHDR	00000208
DYN\$C_UCB	=	00000010			PDT\$L_DGHDRSZ	00000190
ELOG\$R_BYTES	*****		X	03	PDT\$L_DGNETHD	00000194
ELOG\$REGDUMP	*****		X	03	PDT\$L_DQELOGOUT	000002E0
FATAL_QIO	=	00000038	R	03	PDT\$L_GPTBASE	0000022C
FUNCTION\$LEN	=	00000010			PDT\$L_GPTLEN	00000230
IOCS\$MNTVER	*****		X	03	PDT\$L_LBDG	00000184
IOCS\$REQCOM	*****		X	03	PDT\$L_MFQ	00000100
IOCS\$RETURN	*****		X	03	PDT\$L_MFQHDR	0000020C
IPL\$SCS	=	00000008			PDT\$L_MQELOGOUT	00000320
MASK\$R	=	00000000			PDT\$L_MTC	00000104
MASK\$L	=	00000000			PDT\$L_PFAR	00000108
PASCTLINIT	*****		X	02	PDT\$L_PMC	000000E8
PAS\$DDT	=	00000000	RG	03	PDT\$L_POLLERDUE	0000018C
PAS\$END	*****		X	02	PDT\$L_POOLDUE	00000188
PAS\$FUNCTION	=	00000045	R	03	PDT\$L_PPR	0000010C
PAS\$INT	*****		X	02	PDT\$L_PS	000000EC
PAS\$UNITINIT	*****		X	02	PDT\$L_PSR	000000F8
PA_CNF	=	00000000			PDT\$L_SPTBASE	00000224
PA_CQ0	=	00000908			PDT\$L_SPTLEN	00000228
PA_CQ1	=	0000090C			PDT\$L_VBDT	0000021C
PA_CQ2	=	00000910			PDT\$L_VPQB	00000218
PA_CQ3	=	00000914			PDT\$Q_COMQ2	000001F0
PA_DFQ	=	00000928			PDT\$Q_COMQ3	000001F8
PA_MADR	=	00000014			PDT\$Q_COMQBASE	000001E0
PA_MDATR	=	00000018			PDT\$Q_COMQH	000001E8
PA_MFQ	=	0000092C			PDT\$Q_COMQL	000001E0
PA_MTC	=	00000930			PDT\$Q_DFREQ	000001D0
PA_MTEC	=	00000934			PDT\$Q_FORMPB	00000174
PA_PDC	=	00000920			PDT\$Q_MFREQ	000001D8
PA_PEC	=	0000091C			PDT\$Q_RSPQ	00000200
PA_PESR	=	0000093C			PDT\$Q_TEMP_RSPQ	0000019C
PA_PFAR	=	00000938			PDT\$W_BDTLEN	00000220

PATABLES  
Symbol table

PDTSW_DQELEN	00000210
PDTSW_LPORT_STS	00000110
PDTSW_MQELEN	00000214
PDTSW_PBCOUNT	00000112
PDTSW_STDGDYN	00000198
PDTSW_STDGUSED	0000019A
SIZ.	= 00000001
SSS_ILLIOFUNC	= 000000F4
UCBSB_DEVCLASS	= 00000040
UCBSB_DIPL	= 0000005E
UCBSB_ERTCNT	= 00000080
UCBSB_ERTMAX	= 00000081
UCBSB_FIPL	= 0000000B
UCBSB_LMERTCNT	000000D2
UCBSB_LMERTMAX	000000D3
UCBSB_LMEST	000000D0
UCBSB_LMET	000000D1
UCBSC_PASIZE	= 00001B4
UCBSK_ERRDGBYTS	= 00000084
UCBSK_LMPKTBYTS	= 00000040
UCBSL_CICMD	000000F0
UCBSL_DEVCHAR	= 00000038
UCBSL_DPC	= 0000009C
UCBSL_MSGFKBLK	000000A0
UCBSN_LSADDR	000000D8
UCBSN_LSID	000000DE
UCBSN_RSADDR	000000E4
UCBSN_RSID	000000EA
UCBST_MSGDATA	000000F8
UCBST_OPAO_TEMP	000000B8
UCBSW_LMERRCNT	000000D4
UCBSW_MSGBYTCNT	000000F4
UCBSW_MSGPPDTYP	000000F6
VECSL_INITIAL	= 0000000C
VECSL_UNITINIT	= 00000018

-----  
! Psect synopsis !  
-----

PSECT name
-----
ABS .
\$ABSS
SSS105_PROLOGUE
SSS115_DRIVER

Allocation	PSECT No.	Attributes
-----	-----	-----
00000000 ( 0.) 00 ( 0.) NOPIC USR CON ABS LCL NOSHR NOEXE NORD NOWRT NOVEC BYTE		
00000944 ( 2372.) 01 ( 1.) NOPIC USR CON ABS LCL NOSHR EXE RD WRT NOVEC BYTE		
0000006D ( 109.) 02 ( 2.) NOPIC USR CON REL LCL NOSHR EXE RD WRT NOVEC BYTE		
00000055 ( 85.) 03 ( 3.) NOPIC USR CON REL LCL NOSHR EXE RD WRT NOVEC LONG		

-----  
! Performance indicators !  
-----

Phase
-----
Initialization
Command processing
Pass 1
Symbol table sort

Page faults	CPU Time	Elapsed Time
-----	-----	-----
35	00:00:00.07	00:00:00.34
133	00:00:00.50	00:00:04.46
418	00:00:11.75	00:00:38.66
0	00:00:01.67	00:00:04.79

PATABLES  
VAX-11 Macro Run Statistics

N 7

16-SEP-1984 01:07:58 VAX/VMS Macro V04-00  
5-SEP-1984 00:17:04 [DRIVER.SRC]PATABLES.MAR;1

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Pass 2	48	00:00:01.75	00:00:05.63
Symbol table output	18	00:00:00.10	00:00:00.23
Psect synopsis output	2	00:00:00.02	00:00:00.02
Cross-reference output	0	00:00:00.00	00:00:00.00
Assembler run totals	656	00:00:15.87	00:00:54.13

The working set limit was 1650 pages.

91602 bytes (179 pages) of virtual memory were used to buffer the intermediate code.

There were 90 pages of symbol table space allocated to hold 1619 non-local and 0 local symbols.

165 source lines were read in Pass 1, producing 15 object records in Pass 2.

31 pages of virtual memory were used to define 27 macros.

-----  
! Macro library statistics !  
-----

Macro library name

-----  
-\$255\$DUA28:[DRIVER.OBJ]PALIB.MLB;1  
-\$255\$DUA28:[SYS.OBJ]LIB.MLB;1  
-\$255\$DUA28:[SYSLIB]STARLET.MLB;2  
TOTALS (all libraries)

Macros defined

-----  
3  
14  
8  
25

1981 GETS were required to define 25 macros.

There were no errors, warnings or information messages.

MACRO/LIS=LISS:PATABLES/OBJ=OBJ\$:PATABLES MSRC\$:PATABLES/UPDATE=(ENH\$:PATABLES)+EXECML\$/LIB+LIB\$:PALIB.MLB/LIB

0115 AH-BT13A-SE  
VAX/VMS V4.0

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